

INFRASTRUCTURE

- Grid – AFS retired, going to SLF 5, ramp up capacity
- Bluearc - performance good, need to clean and expand
- Enstore – have admin access, could change raw data owner
- Nucomp – Soudan network upgrade, jobsub reunification
- GPCF – testing minosgsvm01(SLF5)
- Servers – stable, ongoing ganglia and aklog issues

EXECUTIVE SUMMARY

- Young Minos issues:
 - Lent minos54 to NOvA – asking for it back now
 - scaling to 5000 Grid jobs – will try to ramp up
- Raw Data file ownership – will change from buckley to minosraw
- Bluearc issues
 - /grid/fermiapp is available throughout Fermilab
 - Hoping to triple disk/\$ ratio via Bluearc Data Migration
 - Need more disk, and Satabeast retirement
 - Moving some users and groups from data to data2 (scavan)
 - Need to clear 10 TB of mcimport/STAGE
- Will request more GPCF virtual systems (32 bit, etc)
- Scheduled downtime 2010 Sep 23 for kernels, PNFS, Fermigrid, etc
- Soudan network upgrade pending hardware delivery, any day now
- Planning for Condor 7.4 upgrade and jobsub script Reunification with IF

GRID

- We continue to reach peaks of 2000 running jobs
 - still want 5000, will ask permission to scale up
- Still using wrapper for condor_rm, condor_hold
 - To prevent SAZ authentication overload
 - Condor 7.4 upgrade will fix this internally, soonish
- CPN
 - 2.8 million locks served to Minos
 - Used by Minerva, Nova, Mu2e
- Removed ability to submit to Grid AFS nodes Aug 20
 - they are gone now
- Fermigrid workers are moving to SLF 5.4 (all CDF, some GP)

Bluearc

- /grid/fermiapp exported to *.fnal.gov readonly in July
- Performance tests using CMS/DDN disks
 - Demonstrated 1 GByte/sec sustained delivery
 - Modest slowdowns with 50-100 clients, survive to 1000
 - Writes are similar to reads, no need for separate regulation
- 1 hour slowdown May 25 due to 9.5 MB files below cpn threshold
 - new cpn with adjustable small file limit (1 MB) Sep 2
- 30 TB additional /minos/data installed, half used already
- noexec export of /grid/data, /minos/data July 15 (Grid security)'
- Requesting Bluearc Data Migration allowing cost effective expansion
 - would move existing Satabeast to backend
- Have root access to /minos/* Bluearc systems
 - Moving some users and analysis to data2 (scavan was first)

Enstore

- We have root access to /pnfs/minos
- Propose to change owner of raw data from buckley to minosraw
- Tapes being moved, will keep raw data Vault copies separate

NUCOMP

- GPCF hardware is installed and running.
- Soudan networking upgrade hardware is arriving
- 600 cores new Fermigrid processing purchased, 1/3 for Minos
- Dennis Box is working on Reunification of minos_jobsub
 - REX will eventually take over from Ryan
- Next meeting Wed. Sep 22.

GPCF

- Initial configuration for GPCF
 - 14 interactive, 14 batch hosts
 - /scratch/minos 10 TB NFS served
 - Interactive systems are Oracle VM virtual machines
- minosgpvm01 is running SLF 5.4 , give it a try !
- We will ask for more virtual machines for testing
 - SLF 4.7 32 bit to replace minos26

Minos Servers

- Minos Cluster nodes are minos50 through minos54
- /local/scratch* were readonly through July 15 due to raid controller problems, now resolved.
- Lent minos54 to NOVA short term
 - Should get it back now that GPCF batch is up, idle after June
- Database servers upgraded
 - Ifora1 Oracle/SAM dev/int server June 27
 - Ifora2 Oracle/SAM production server July 15
 - Minos-mysql2 disk expanded July 15
- Ganglia offline for Minos Cluster July 15-Aug 15
 - continuing to ask that this be supported
- Need aklog for SLF 5 (since Dec 2008) tracked by Problem Management